

What is claimed is:

1. A window having ventilation equipment comprising:

a window frame formed with a mounting hole penetrating from outdoor side to indoor side;

a casing which can be fastened to or unfastened from the mounting hole of said window frame;

an outdoor air suction opening formed at a position of the outdoor side surface of said casing;

an outdoor air exhaust opening formed at a position of the indoor side surface of said casing;

an outdoor air flow passage formed within said casing for interconnecting said outdoor air suction opening with said outdoor air exhaust opening to each other;

a first fan provided in said outdoor air flow passage for inhaling outdoor air forcibly from said outdoor air suction opening and blowing it to said outdoor air exhaust opening;

an indoor air suction opening formed at another position of the indoor side surface of said casing;

an indoor air exhaust opening formed at another position of the outdoor side surface of said casing;

an indoor air flow passage formed with a wall partitioned against said outdoor flow passage for interconnecting said indoor air suction opening with said indoor air exhaust opening to each other; and

a second fan provided in said indoor air flow passage for inhaling indoor air forcibly from said indoor air suction opening and blowing it to said indoor air exhaust opening.

2. The window having ventilation equipment of claim 1, wherein a first heat exchanger is provided in said outdoor air flow passage and a second heat exchanger is provided in said indoor air flow passage at the position corresponding to said first heat exchanger.

3. The window having ventilation equipment of claim 2, wherein said first heat exchanger and said second heat exchanger are made of a heat exchange plate adjoining the partition wall and a plurality of heat exchange fins extending from said heat exchange plate on each said flow passage.

4. The window having ventilation equipment of claim 1, wherein an indoor air circulating opening for inhaling indoor air to said outdoor air flow passage is formed at still another position of the indoor side surface of said casing, and a switching means for selectively opening or closing said outdoor air suction opening and said indoor air circulating opening is provided within said casing.

5. The window having ventilation equipment of claim 4, wherein said switching means is provided with a damper comprising:

- a first switching portion formed with a plurality of first communicating openings adjoining the inside surface of said indoor air circulating opening which can communicate with said indoor air circulating opening;

- a second switching portion formed with a plurality of second communicating openings adjoining the inside surface of said outdoor air suction opening for communicating with said outdoor air suction opening; and

- a connecting portion for opening selectively said indoor air circulating opening or said outdoor air suction opening by connecting said first switching portion with said second switching portion to each other, and sliding said first switching portion and said second switching portion together.

6. The window having ventilation equipment of claim 5, wherein said second switching portion is formed with a third communicating opening which can communicate with said indoor air exhaust opening for switching said outdoor air suction opening and said indoor air exhaust opening together.

7. The window having ventilation equipment of claim 1, wherein said outdoor air flow passage includes a cleaning filter which can be inserted from the outside of said casing and is detachable.

8. The window having ventilation equipment of claim 1, wherein solar cell for supplying power is provided on window glass which is provided in said window frame.

9. The window having ventilation equipment of claim 1, wherein a sliding groove extending from indoor side to outdoor side is formed on the inside of said mounting hole, and a sliding protrusion for allowing sliding insertion of said casing into said sliding groove toward the inside of said mounting hole is formed on the lateral side of said casing.

10. The window having ventilation equipment of claim 1, wherein a microprocessor having a gas detecting sensor which can detect the content of harmful gases contained in indoor air, thereby controlling the operation of said first fan and said second fan, is provided in the indoor side surface of said window frame.

11. A window having ventilation equipment comprising:

- a window frame formed with a separation passage between outdoor window glass and indoor window glass;

- a first mounting hole penetrating from outdoor side to indoor side at a position of said window frame, the inside of which can communicate with said separation passage;

- a second mounting hole penetrating from outdoor side to indoor side at another position of said window frame, the inside of which can communicate with said separation passage;

- a first casing inserted into said first mounting hole, and formed with a first indoor air flow opening which is opened toward indoor side and a first outdoor air flow opening which is opened toward outdoor side;

- a second casing inserted into said second mounting hole, and formed with a second indoor air flow opening which is opened toward indoor side and a second outdoor air flow opening which is opened toward outdoor side;

- a fan provided in the inside of said first casing for blowing from the inside of said first casing to said second casing through said separation passage; and

a plurality of switching means respectively provided in said first indoor air flow opening and said first outdoor air flow opening, as well as said second indoor air flow opening and said second outdoor air flow opening.

12. The window having ventilation equipment of claim 11, wherein said switching means comprises:

a switching portion provided on the inside surface of each said flow opening respectively, and formed with a communicating opening which can communicate with said flow opening;

a protrusion sill protruded on a side of said switching portion;

a screw axis penetrating through said protrusion sill, and engaged with said protrusion sill; and

a reciprocal rotating motor for sliding said switching portion with reciprocal rotation of said screw axis.

13. The window having ventilation equipment of claim 11, wherein a cleaning filter is inserted at the location adjoining the entrance of said separation passage of said first casing.

14. The window having ventilation equipment of claim 11, wherein a sliding groove extending from indoor side to outdoor side is formed on the inside of said first mounting hole or said second mounting hole, and a sliding protrusion for allowing sliding insertion of said first casing or said second casing respectively into said sliding groove toward the inside of said first mounting hole or said second mounting hole is formed on the lateral side of said first casing or said second casing.

15. The window having ventilation equipment of claim 11, wherein a door frame for allowing opening/closing of said indoor window glass or said outdoor window glass is provided in said window frame.

16. The window having ventilation equipment of claim 11, wherein solar cell for supplying power is provided on said indoor window glass.

17. The window having ventilation equipment of claim 11, wherein a microprocessor having a gas detecting sensor which can detect the content of harmful gases contained in indoor air, thereby controlling the operation of said fan, is provided in the indoor side surface of said window frame.